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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
SHIBUYA, MARK LANCE	

ART UNIT	PAPER NUMBER
1639	

DATE MAILED: 04/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/027,782	GASCOYNE ET AL.	
	Examiner	Art Unit	
	Mark L. Shibuya	1639	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-60* is/are pending in the application.

4a) Of the above claim(s) *2-4 and 7-60* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1, 5 and 6* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/25/02; 6/2/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-60 are pending. Claims 2-4 and 7-60 are withdrawn from consideration. Claims 1, 5 and 6 are examined.

Election/Restrictions

2. Applicant's election without traverse the invention of Group I, claims 1-12 and 53-55, and the species of streptavidin, in the reply filed on 1/10/2005, is acknowledged.

3. Claims 2-4, 7-12, 13-52, 53-55 and 56-60 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to nonelected species (claims 2-4, 7-12, and 53-55) and inventions (claims 13-52 and 56-60), there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 1/10/2005.

Specification

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim 1 states: "An engineered microparticle . . . *adapted* to produce a dielectric response, [emphasis added]"; however, said language is not found in the specification.

Information Disclosure Statement

5. The information disclosure statement (IDS), filed 11/25/2002, fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. No copies of WO

93/04199, IDS reference no. B7 and Barlow et al., IDS reference no. C9, have been received. The IDS has been placed in the application file, but the information regarding reference no.s B7 and C9, referred to therein have not been considered.

In regards to the IDS filed 11/25/2002, the reference of Jones, reference C49, has been considered only to extent of pp. 34-83, as received. In regards to the IDS filed 11/25/2002, the reference of Pohl, reference C81, has been considered only to extent of pages v.-x., as received. In regards to the IDS filed 11/25/2002, US Patent Application Serial Number 09/883,112, reference no. C108, has been considered, but the citation to said application has been crossed out on the IDS.

Claim Rejections - 35 USC § 112, Second Paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 5 and 6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, and its dependent claims, recite the term "dielectrically-dispersive", which renders the claims vague and indefinite. The term "dielectrically-dispersive" is not defined by the claim, the specification does not provide a clear meaning for the term, and one of skill in the art would not be reasonably apprised of the metes and bounds of the invention. In Example 12, "Utilizing Dielectrically-Dispersive Materials", the specification states:

> Many materials exhibit a high dielectric permittivity in low frequency AC electrical fields and a much lower permittivity at sufficiently high AC

> frequencies. In an intermediate, so-called dispersive, frequency range, the permittivity falls with increasing frequency (see FIG. 23). In FIG. 23, the solid lines show dielectric loss that gives rise to traveling wave dielectrophoresis and electrorotation while the dashed lines show dielectric permittivity (dielectric constant) that gives rise to conventional dielectrophoresis.

Specification at p. 65, lines 17-23. The specification does not define the term "dielectrically-dispersive", and it is unclear whether the above intermediate, "so-called dispersive", frequency range is a characteristic that is common to all materials, or defines a subset of "dielectrically-dispersive materials"; or whether "dielectrically-dispersive materials" are materials that "exhibit a high dielectric permittivity in low frequency AC electrical fields and a much lower permittivity at sufficiently high AC frequencies." Given the deficiencies of the specification's disclosure, the Webster's definition of dispersive i.e., "[t]ending to disperse or become disperse" in the context of dielectrophoresis, provides a definition where a dielectrically-dispersive material is any material that disperses under dielectrophoretic conditions. Webster's II New Riverside University Dictionary, (1994), Houghton Mifffiin Co., Boston, page 388. Because the term "dielectrically-dispersive" is capable of several different meanings, the practitioner would not be reasonably apprised of the metes and bounds of the claimed invention.

Claim 1 recites the term "adapted", which renders the claim vague and indefinite, because it is unclear as to what sense an engineered microparticle is "adapted" to produce a dielectric response.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 5 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Parton et al., US 5,993,631, (IDS entered 11/25/2002, reference no. A54).

The claims are drawn to an engineered microparticle fabricated to be "dielectrically dispersive" and "adapted" to produce a dielectric response to an applied electric field such that the microparticle is maneuverable by dielectrophoresis; wherein the microparticle comprises streptavidin, as in claim 5, and comprises one or more biotinylated probes coupled to the streptavidin, as in claim 6. The claims are interpreted in light of the indefiniteness of the terms "dielectrically-dispersive" and "adapted", as set forth above in the rejection under 35 U.S.C. 112, second paragraph.

Parton et al., US 5,993,631, throughout the patent and abstract, teach an engineered microparticle fabricated to produce a dielectric response to an applied electric field (col. 7, lines 42-49) such that the microparticle (col. 8, lines 49-51) is maneuverable by dielectrophoresis (see Background of the Invention, col. 1, lines 20-36, and Summary of the Invention, col. 2, lines 38-col. 3, line 24, Fig.s 8-12); wherein the microparticle comprises streptavidin (specification at col. 3, lines 25-38, especially line 38, and col. 3, line 60-col. 4, line 19) and comprises one or more biotinylated probes (col. 9, lines 13-41, col. 10, lines 13-lines 35). Parton et al. does not teach explicitly biotinylated probes coupled to streptavidin, as in claim 6. However, absent evidence to the contrary, one of ordinary skill in the art would have immediately envisioned coupling biotinylated probes to the streptavidin, since it was well known in

the art to use biotin-streptavidin binding pairs in the capture of probes, because streptavidin binds biotin with high affinity, as evidenced by Ullman et al., US 6,103,537, at col. 8, lines 41-63, col. 26, lines 29-39, col. 31, lines 13-21.

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. The examiner respectfully submits that the examined claims are product-by-process claims. In regard to product-by-process claims, the Federal Circuit has held:

> [E]ven though product-by-process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.

In re Thorpe, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (citations omitted); see also MPEP 2113. The examiner respectfully notes that the use of 35 U.S.C. 102/103 rejections for product-by-process claims has been approved the courts, stating, for example:

> [T]he lack of physical description in a product-by-process claim makes determination of the patentability of the claim more difficult, since in spite of the fact that the claim may recite only process limitations, it is the patentability of the product claimed and not of the recited process steps which must be established. We are therefore of the opinion that when the prior art discloses a product which reasonably appears to be either identical with or only slightly different than a product claimed in a product-by-process claim, a rejection based alternatively on either section 102 or section 103 of the statute is eminently fair and acceptable. *As a practical matter, the Patent Office is not equipped to manufacture products by the myriad of processes put before it and then obtain prior art products and make physical comparisons therewith.* [Emphasis added].

In re Brown, 459 F.2d 531, 535, 173 USPQ 685, 688 (CCPA 1972); see, MPEP 2113.

9. Claims 1, 5 and 6 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Singh et al., US 2002/0034827 A1, (priority to US provisional application No. 60/239,662, filed 10/12/2000).

The claims are drawn to an engineered microparticle fabricated to be "dielectrically dispersive" and "adapted" to produce a dielectric response to an applied electric field such that the microparticle is maneuverable by dielectrophoresis; wherein the microparticle comprises streptavidin, as in claim 5, and comprises one or more biotinylated probes coupled to the streptavidin, as in claim 6. The claims are interpreted in light of the indefiniteness of the terms "dielectrically-dispersive" and "adapted", as set forth above in the rejection under 35 U.S.C. 112, second paragraph.

Singh et al., US 2002/0034827 A1, throughout the patent, teach an engineered self-assembled monolayer (SAM) coated microparticle fabricated to produce a dielectric response to an applied electric field (para [0133]) such that the microparticle (para [0132]) is maneuverable by dielectrophoresis; wherein the microparticle comprises streptavidin (Examples 2, 3, 5, 6, para [0173]-[0176], [0179]-[0182]) and comprises one or more biotinylated probes coupled to the streptavidin ([0176]).

10. Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wang et al., Biophysical Journal, Vol. 74, May 1998, pp. 2689-2701, (IDS entered 11/25/2002, reference no. C99).

Claim 1 is drawn to an engineered microparticle fabricated to be "dielectrically dispersive" and "adapted" to produce a dielectric response to an applied electric field such that the microparticle is maneuverable by dielectrophoresis.

Wang et al., throughout the publication and abstract, and at p. 2689, para 1-p. 2690, para 1 and para 8, teach an engineered microparticle (p. 2694, para 2) fabricated

for particle separation (i.e., "adapted" to be "dielectrically dispersive") and to produce a dielectric response to an applied electric field such that the microparticle is maneuverable by dielectrophoresis.

11. Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ayers et al., US 5,801,092.

Claim 1 is drawn to an engineered microparticle fabricated to be "dielectrically dispersive" and "adapted" to produce a dielectric response to an applied electric field such that the microparticle is maneuverable by dielectrophoresis. The claims are interpreted in light of the indefiniteness of the terms "dielectrically-dispersive" and "adapted", as set forth above in the rejection under 35 U.S.C. 112, second paragraph.

Ayers et al., throughout the patent and abstract, discloses an engineered microparticle comprising a ceramic core and a non-polar coating (col. 5, lines 12-50) that provides an insulating layer with a low dielectric constant (col. 2-col. 3, bridging paragraph, particularly, col. 3, lines 9-11 and 48-55), which, absent evidence to the contrary, produce a dielectric response to an applied electric field such that the microparticle is maneuverable by dielectrophoresis and is "dielectrically dispersive" and so "adapted".

12. Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ewart et al., US 5,922,537.

Claim 1 is drawn to an engineered microparticle fabricated to be "dielectrically dispersive" and "adapted" to produce a dielectric response to an applied electric field

such that the microparticle is maneuverable by dielectrophoresis. The claims are interpreted in light of the indefiniteness of the terms "dielectrically-dispersive" and "adapted", as set forth above in the rejection under 35 U.S.C. 112, second paragraph.

Ewart et al., throughout the patent and at col. 4, lines 6-14, col. 11, lines 7-30, discloses an engineered microparticle which will produce a dielectric response to an applied electric field such that the microparticle is maneuverable by dielectrophoresis and which is, absent evidence to the contrary, "adapted" to be "dielectrically dispersive".

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 1, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parton et al., US 5,993,631, (IDS entered 11/25/2002, reference no. A54).

The claims are drawn to an engineered microparticle fabricated to be "dielectrically dispersive" and "adapted" to produce a dielectric response to an applied electric field such that the microparticle is maneuverable by dielectrophoresis; wherein

the microparticle comprises streptavidin, as in claim 5, and comprises one or more biotinylated probes coupled to the streptavidin, as in claim 6. The claims are interpreted in light of the indefiniteness of the terms "dielectrically-dispersive" and "adapted", as set forth above in the rejection under 35 U.S.C. 112, second paragraph.

Parton et al., US 5,993,631, throughout the patent and abstract, teach an engineered microparticle fabricated to produce a dielectric response to an applied electric field (col. 7, lines 42-49) such that the microparticle (col. 8, lines 49-51) is maneuverable by dielectrophoresis (see Background of the Invention, col. 1, lines 20-36, and Summary of the Invention, col. 2, lines 38-col. 3, line 24, Fig.s 8-12); wherein the microparticle comprises streptavidin (specification at col. 3, lines 25-38, especially line 38, and col. 3, line 60-col. 4, line 19) and comprises one or more biotinylated probes (col. 9, lines 13-41, col. 10, lines 13-lines 35).

Parton et al. does not teach explicitly biotinylated probes coupled to streptavidin, as in claim 6.

Ullman et al., US 6,103,537, at col. 8, lines 41-63, col. 26, lines 29-39, col. 31, lines 13-21, include the use of dielectrophoresis in electroseparation and DNA analytical arts (col. 12-col. 13 and col. 33-col. 34, bridging paragraphs) and teach that it was well-known to use biotin-streptavidin binding pairs in the capture of probes, because streptavidin binds biotin with high affinity.

It would have been prima facie obvious at the time the invention was made for one of ordinary skill in the art to have made and used a microparticle engineered to be

dielectrophoretically maneuverable, wherein the microparticle comprises streptavidin and comprises one or more biotinylated probes coupled to the streptavidin.

One of ordinary skill in the art would have been motivated to use a dielectrophoretically maneuverable microparticle, wherein the microparticle comprises streptavidin and comprises one or more biotinylated probes coupled to the streptavidin, because streptavidin binds biotin with high affinity, as taught by Ullman.

Absent evidence to the contrary, one of ordinary skill in the art would have had a reasonable expectation of success in making and using microparticle comprising streptavidin and one or more biotinylated probes coupled to the streptavidin, because the use of streptavidin-biotin specific binding pairs attached to beads and the use of dielectrophoretically maneuverable microparticles were well-known in the art.

14. Claim 1, 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Wang et al.**, Biophysical Journal, Vol. 74, May 1998, pp. 2689-2701, (IDS entered 11/25/2002, reference no. C99) as applied to claim1 above, and further in view of **Ullman et al.**, US 6,103,537.

The claims are drawn to an engineered microparticle fabricated to be "dielectrically dispersive" and "adapted" to produce a dielectric response to an applied electric field such that the microparticle is maneuverable by dielectrophoresis; wherein the microparticle comprises streptavidin, as in claim 5, and comprises one or more biotinylated probes coupled to the streptavidin, as in claim 6. The claims are interpreted

in light of the indefiniteness of the terms "dielectrically-dispersive" and "adapted", as set forth above in the rejection under 35 U.S.C. 112, second paragraph.

Wang et al., teaches the engineered microparticle, but Wang et al. does not teach a microparticle comprising streptavidin and comprises one or more biotinylated probes coupled to the streptavidin.

Ullman et al., US 6,103,537, at col. 8, lines 41-63, col. 26, lines 29-39, col. 31, lines 13-21, include the use of dielectrophoresis in electroseparation and DNA analytical arts (col. 12-col. 13 and col. 33-col. 34, bridging paragraphs) and teach that it was well-known to use biotin-streptavidin binding pairs in the capture of probes, because streptavidin binds biotin with high affinity.

It would have been prima facie obvious at the time the invention was made for one of ordinary skill in the art to have made and used a microparticle engineered to be dielectrophoretically maneuverable, wherein the microparticle comprises streptavidin and comprises one or more biotinylated probes coupled to the streptavidin.

One of ordinary skill in the art would have been motivated to use a dielectrophoretically maneuverable microparticle, wherein the microparticle comprises streptavidin and comprises one or more biotinylated probes coupled to the streptavidin, because streptavidin binds biotin with high affinity, as taught by Ullman.

Absent evidence to the contrary, one of ordinary skill in the art would have had a reasonable expectation of success in making and using microparticle comprising streptavidin and one or more biotinylated probes coupled to the streptavidin, because

the use of streptavidin-biotin specific binding pairs attached to beads and the use of dielectrophoretically maneuverable microparticles were well-known in the art.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

15. Claims 1, 5 and 6 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-7 of copending Application No. 09/883,112. Although the conflicting claims are not identical, they are not patentably distinct from each other because the engineered microparticle fabricated to be "dielectrically-dispersive" and to produce a dielectric response to an applied electric field such that the microparticle is maneuverable by dielectrophoresis, and variants thereof, of the instant applicant, is so broad as to encompass the engineered microparticle comprising a conductive core and an insulating self-assembled monolayer coating the conductive core, the monolayer having a thickness sufficient to render the microparticle maneuverable by dielectrophoresis, and variants thereof, of claims 1-7, application no. 09/883,112.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

16. Claims 1, 5 and 6 are rejected.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark L. Shibuya whose telephone number is (571) 272-0806. The examiner can normally be reached on M-F, 8:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Wang can be reached on (571) 272-0811. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mark L. Shibuya
Examiner
Art Unit 1639

BENNETT CELSA
PRIMARY EXAMINER

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